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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,797	10/29/2001	Arthur L. Cleary	3128.1001-001	9380

21005 7590 12/15/2003

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EXAMINER

HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,797

Applicant(s)

CLEARY ET AL.

Examiner

Scott Haugland

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings received on 10/20/03 are accepted.

Specification

The disclosure is objected to because of the following informalities:

The specification at page 6, lines 15-16 appears to state that polyurethane is a polyester which is inaccurate.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 3654

Claims 1-3, 10, 11, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Yraceburu et al (U.S. Patent No. 6,409,332).

Yraceburu et al discloses an apparatus and method for transporting a substrate 16 in a printing system including a transport belt 32 with a plurality of holes 321 having a diameter of about 0.1 inch and a spacing of about 1 inch, a vacuum table 307 which generates a vacuum with a vacuum pump motor 303, and a porous sheet 317 positioned between the belt 32 and the vacuum table 307 for restricting fluid flow between the table 307 and the belt 32 so that when a narrow or small sheet of substrate 16 is transported, the flow is restricted due to the porous sheet 317. The porous sheet 317 can be made from a number of different materials (col. 6, lines 16-32) including "sintered materials such as of plastic or metals".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 4-9 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yraceburu et al (U.S. Patent No. 6,409,332).

With regard to claims 4-6, Yraceburu et al discloses all of the claimed subject matter as set forth above except for the vacuum sensor and the CPU coupled to the vacuum sensor and vacuum pump to maintain the vacuum level constant.

Simple control systems for vacuum pump systems including a vacuum sensor and CPU designed to control the motor of the vacuum pump to provide a constant vacuum pressure are well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Yraceburu et al with a simple control system including a vacuum sensor and CPU to control the vacuum pump motor to maintain the vacuum constant in the vacuum table 307 as is well known in the art.

With regard to claims 7-9 and 12-13, Yraceburu et al does not disclose that the transport belt is made from woven polyester or polyurethane having a thickness of about 0.09 inch or stainless steel with a thickness of about 0.008 inch.

Vacuum transport belts being made of woven polyester and polyurethane and stainless steel are well known in the art for their durability and long life.

It would have been obvious to one having ordinary skill in the art to provide Yraceburu et al with a vacuum transport belt made of woven polyester, polyurethane, or stainless steel and having a thickness of about 0.09 inch or 0.008 inch, respectively, because of their well known durability and long life.

With regard to claims 14-15, Yraceburu et al does not disclose that the porous sheet 317 is made specifically out of sintered, porous polyethylene having a thickness of about 0.5 inch. Yraceburu et al does disclose that the porous sheet 317 can be made from a number of different materials (col. 6, lines 16-32) including "sintered materials such as of plastic or metals". Polyethylene is well known for its durability and ease of manufacture.

It would have been obvious to one of ordinary skill in the art to provide Yraceburu et al with a porous sheet made out of sintered, porous polyethylene having a thickness of about 0.5 inch because of its durability and ease of manufacture and its ability to act as a filter in accordance with the specification of Yraceburu et al.

Response to Arguments

Applicants' arguments filed 10/20/03 have been fully considered but they are not persuasive.

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Applicants argue that Yraceburu et al does not disclose a porous sheet positioned between a belt and a vacuum table. However, the porous sheet 317 of Yraceburu et al is located between the transport belt 32 and the vacuum table 307. Note Fig. 3 of Yraceburu et al. The porous sheet acts as a flow resistor so that vacuum is maintained even when a portion of the belt overlying the vacuum table is not covered by a sheet of paper (substrate). Note col. 5, line 50 - col. 6, line 5.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (703) 305-6498. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

4974
sjh
12/8/03

Kathy Matecki
KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600